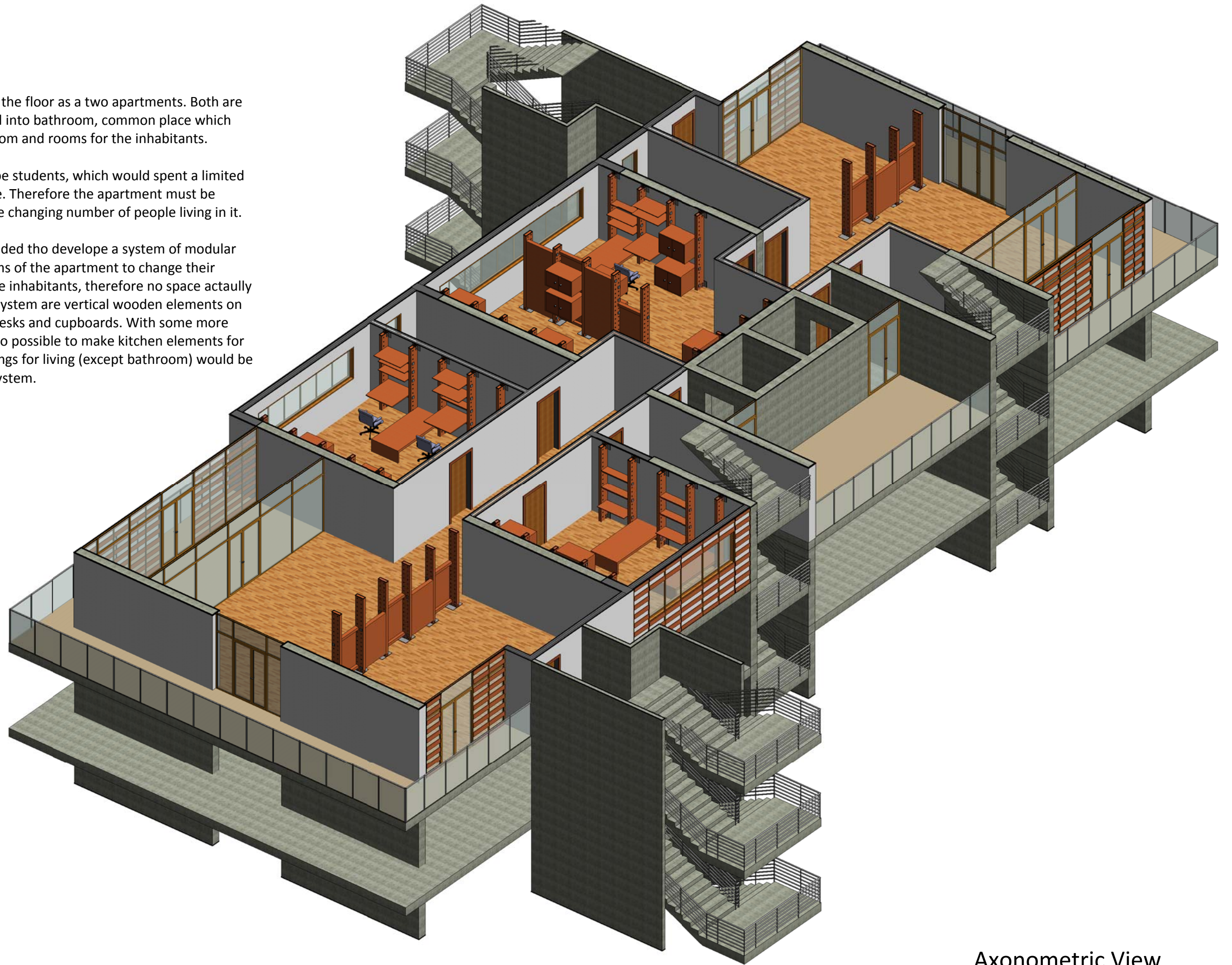




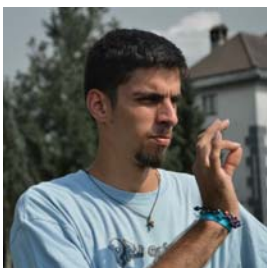
In the project I propose the design of the floor as a two apartments. Both are roughly the same size and are divided into bathroom, common place which can be used as a kitchen and living room and rooms for the inhabitants.

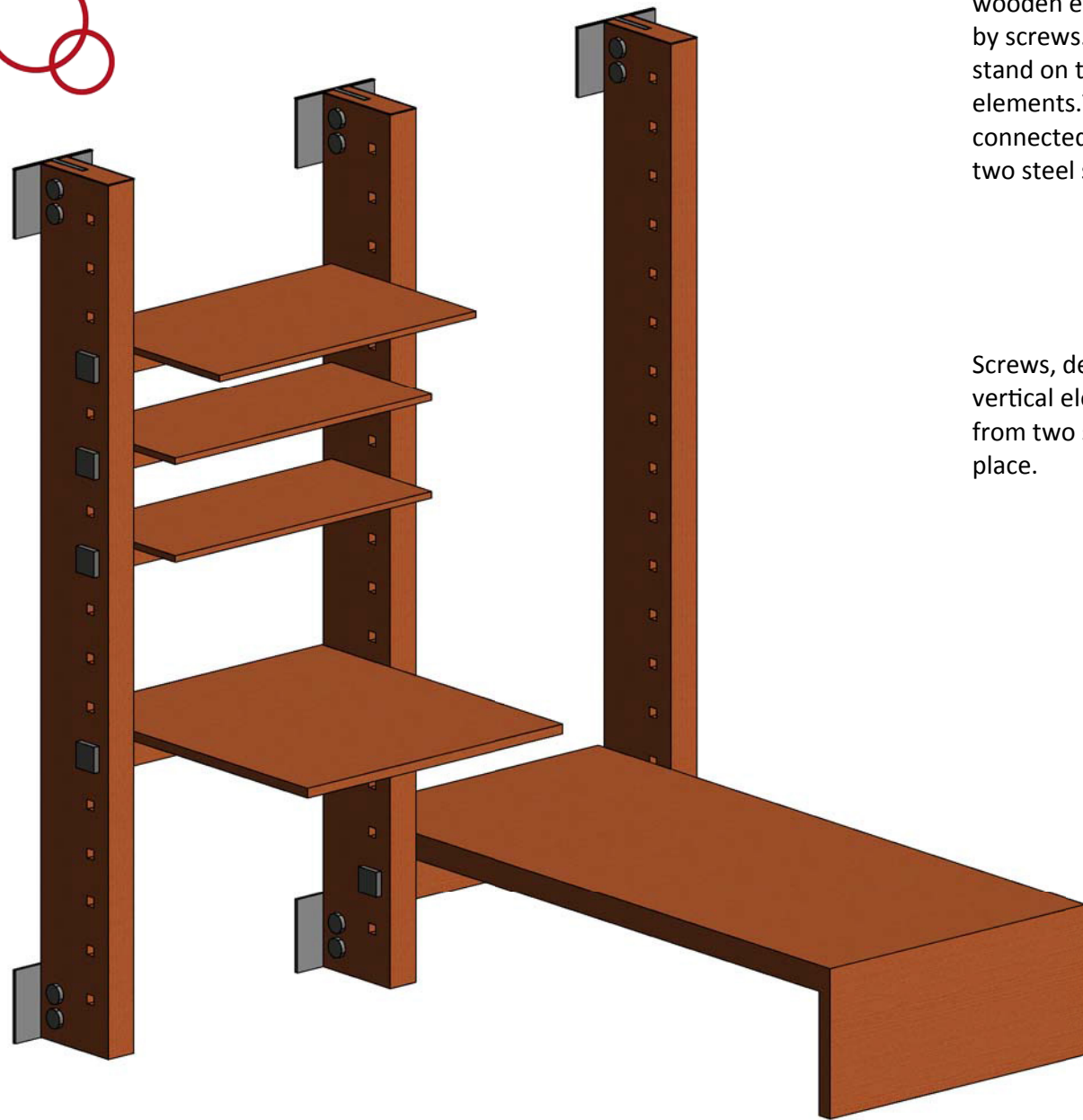
Inhabitants of the apartment would be students, which would spent a limited and different periods of time in Rome. Therefore the apartment must be flexible enough, so that it answers the changing number of people living in it.

Considering the situation given, I decided to develop a system of modular furniture. This would enable the rooms of the apartment to change their function according to the needs of the inhabitants, therefore no space actually have fixed function. The core of this system are vertical wooden elements on which can be attached beds, shelves, desks and cupboards. With some more development I believe it would be also possible to make kitchen elements for this system, so that all necessary things for living (except bathroom) would be possible to be created by using this system.



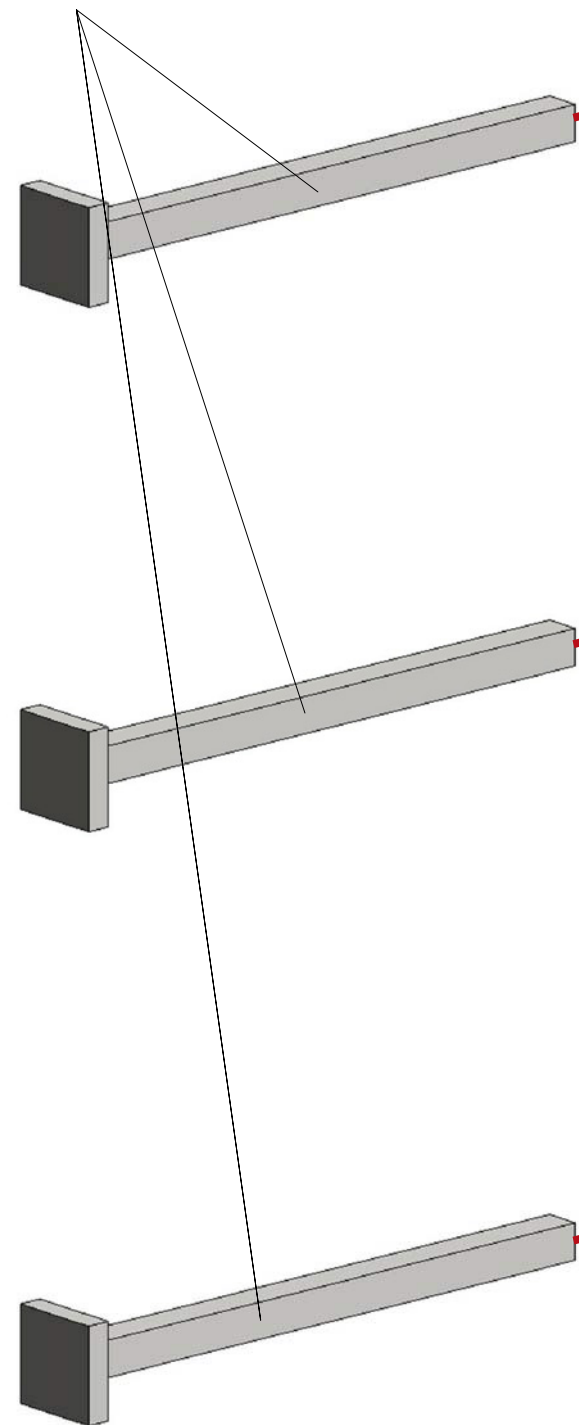
Axonometric View



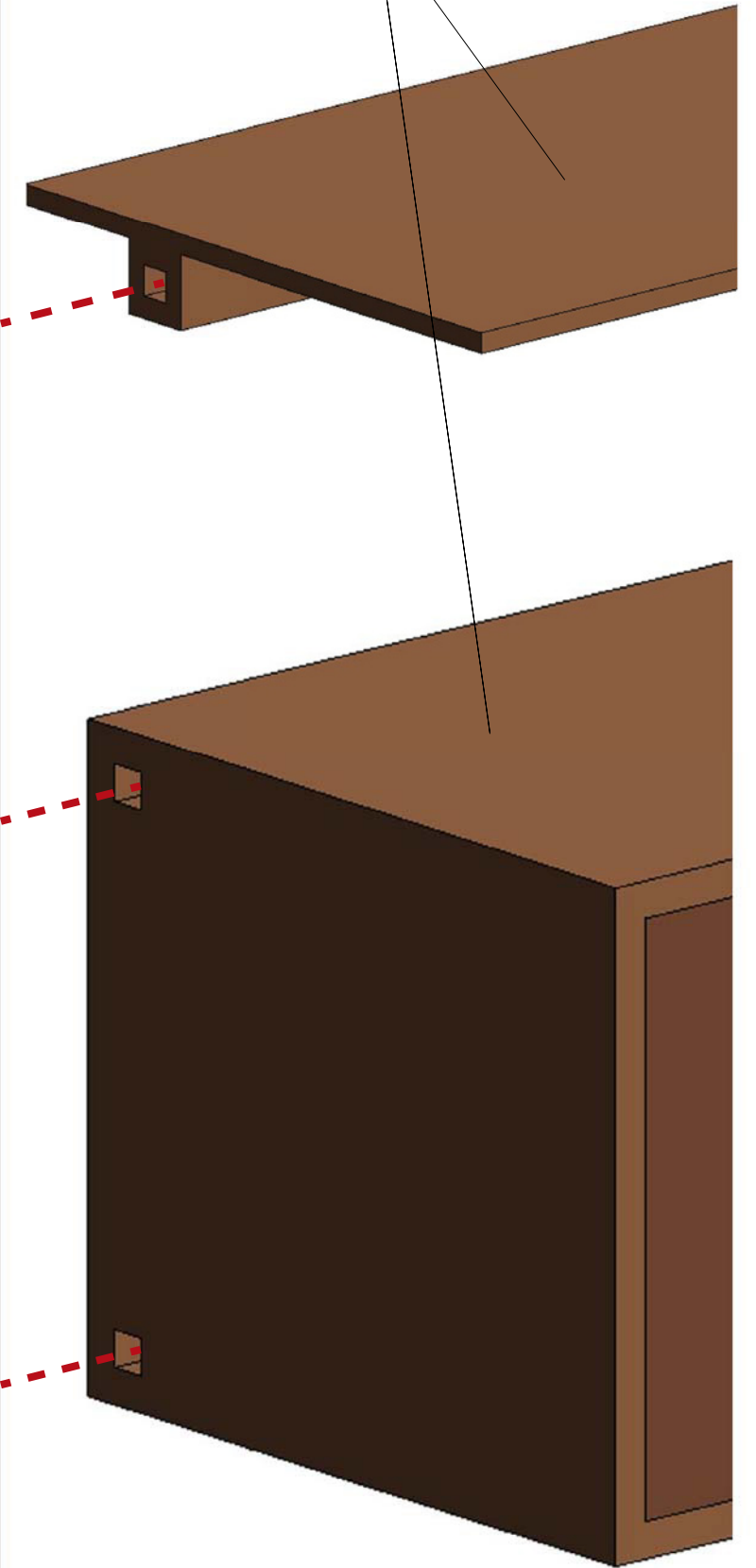


Metal elements enables vertical wooden element to be fixed to the wall by screws. Vertical elements, that stand on the floor, have similar metal elements. The metal element is connected with wooden element with two steel screws.

Screws, designed to fix furniture with vertical elements. They are inserted from two sides, to hold furniture in place.



The furniture can be of different kind, but all are 1m width and all of them are designed in a way that they can be connected to the vertical elements with the use of screws, designed for this purpose.



Example of Modular Furniture scale 1:20

Modular furniture system enables the users of the apartments to design and equip the apartment in the way they need and like.

There are two options how to use the system - it can be attached to the wall or it can be standing on the floor, connected with previously created holes in the floor, so that it can be fixed with the screws to the ground.

Each vertical element, which is fixed on the wall, has 17 holes to which we can fix pieces of furniture - it can hold a bed, shelf, cupboards and desk. Vertical elements, who stands on the floor, have additional 17 holes, which means that we can fix furniture on it from both side. For this case we can also use wooden wall, which woul separate bigger rooms into smaller compartments, so each of the inhabitants could have it's own private place.



The facade of the building is in general made in two different ways. One is concrete facade and the other is glass facade. Both of them have a layer of wooden panels in the exterior side of the building.

The concrete facade is used to close the rooms of the inhabitants and bathrooms, while the glass facade closes kitchen and living room from outside world.

The structure of both facades is shown below.

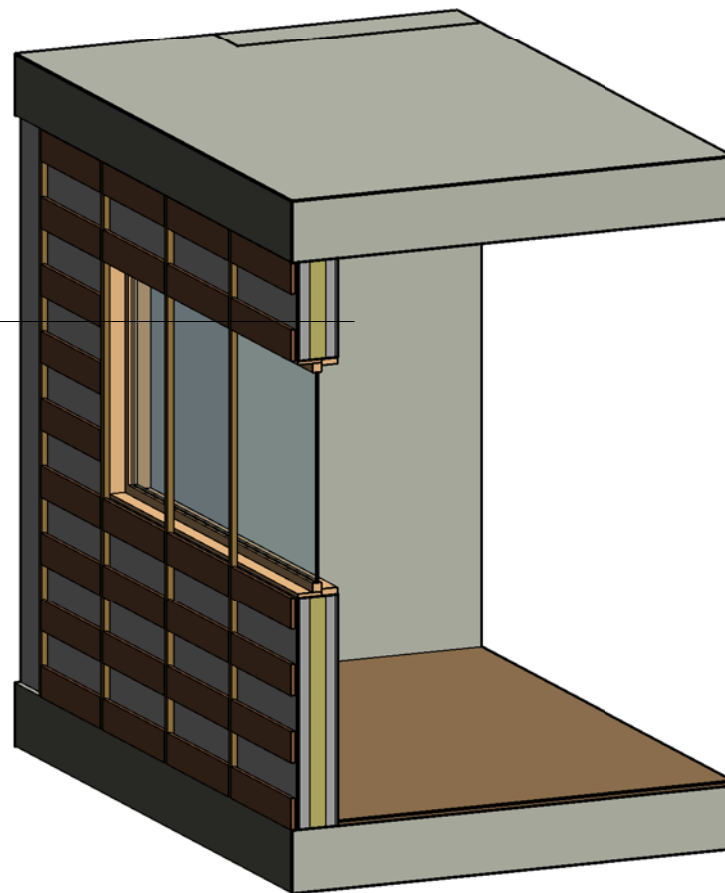
Wooden panels have two roles. On the concrete facade they help the whole floor to appear as one unit. But on the glass facade they have more important role - they provide shadow for the indoor spaces and prevent them from heating up, while still getting natural light inside.

The walls inside the building (KLS -inside wall_20cm) are made from 2cm plaster on both sides, 5cm of concrete on each side and air layer of 6cm in the middle.

KLS - walls			
Type	Family	Count	Width
KLS - exterior wood	Curtain Wall	4	
KLS - exterior wood 2	Curtain Wall	1	
KLS - exterior wood _ window	Curtain Wall	3	
KLS - fence terrace	Curtain Wall	6	
KLS - fence terrace 2	Curtain Wall	1	
KLS - inside wall _ 20cm	Basic Wall	15	0.20 m
KLS - kitchen wall	Curtain Wall	8	
KLS - living room window wall	Curtain Wall	2	
KLS - outside wall	Basic Wall	4	0.30 m
KLS - outside wall_concrete 20cm	Basic Wall	8	0.20 m
KLS - plaster layer - 2cm	Basic Wall	35	0.02 m

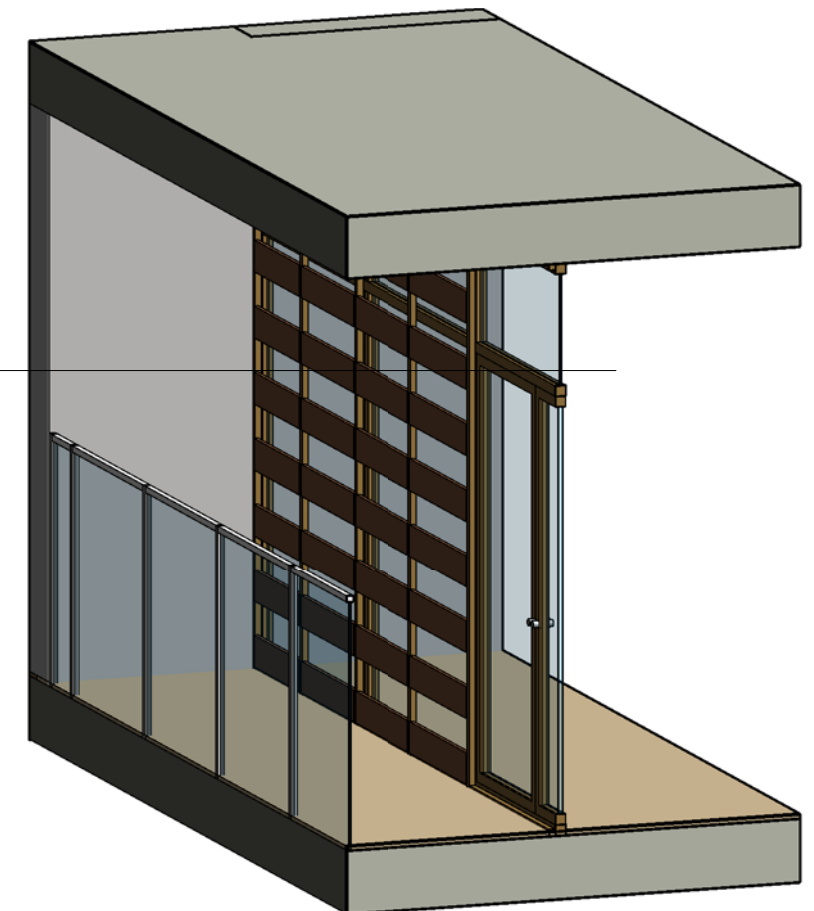
Grand total: 87

2cm wooden facade
1cm plaster
5cm concrete
8cm isolation
5cm concrete
1cm plaster

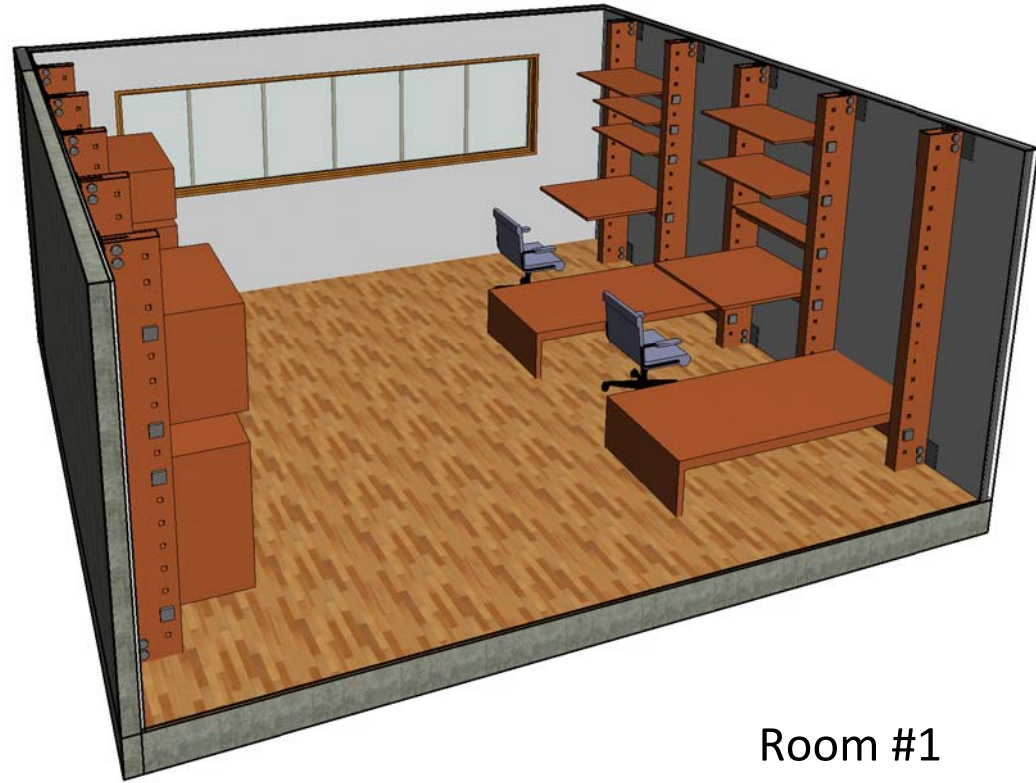


Section concrete facade
scale 1:35

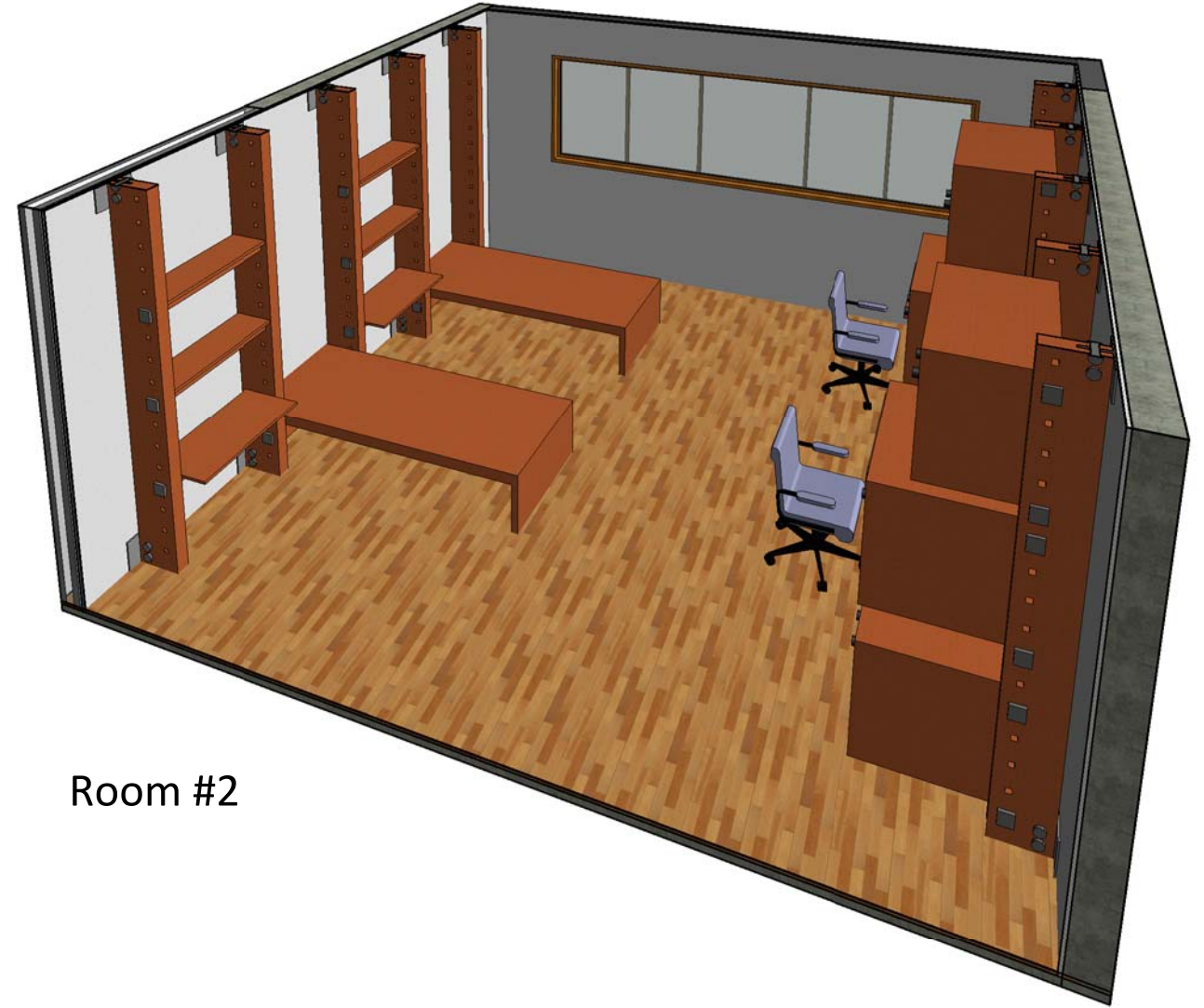
2cm wooden facade
2,5cm glass



Section glass facade
scale 1:35

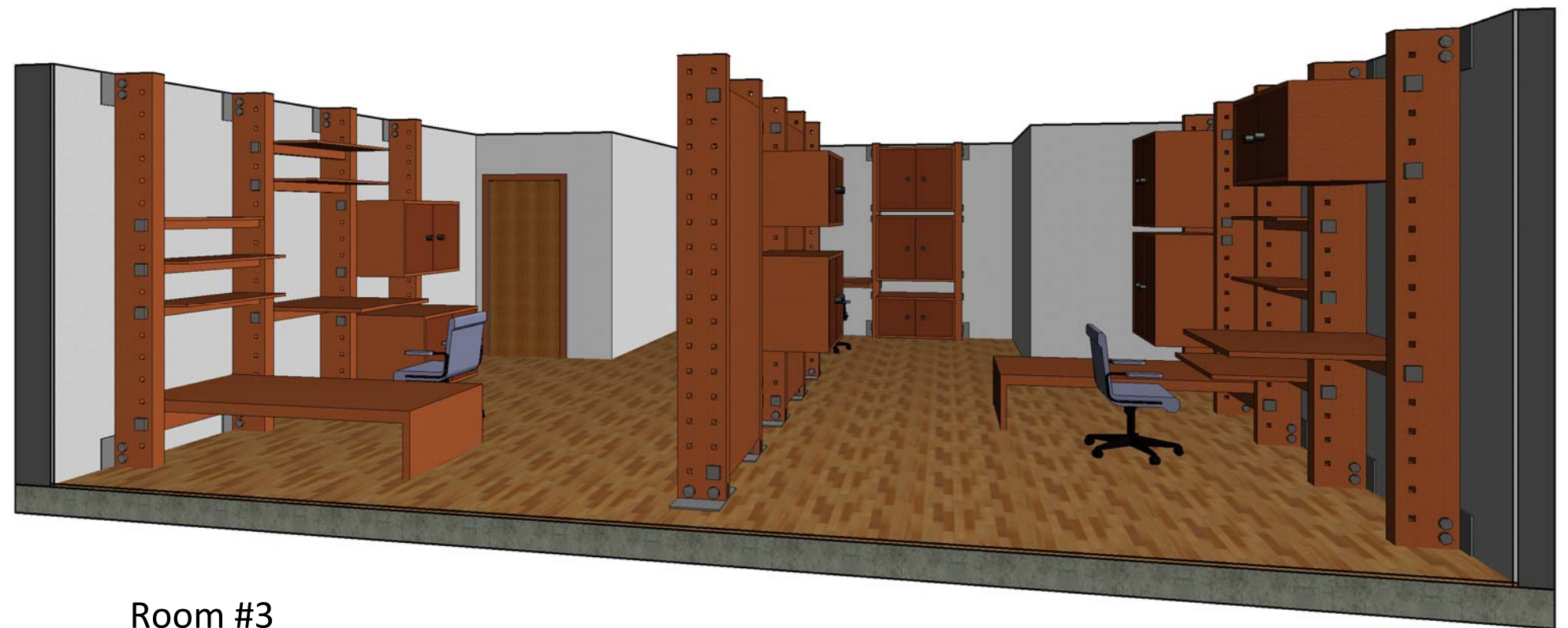


Room #1



Room #2

These are three examples of rooms, which uses the modular furniture. All the elements can be changed at any time with other elements according to the needs of the inhabitants.



Room #3